21. NEW RECORDS OF FISHES FROM GADANA RIVER, KALAKAD MUNDANTHURAI TIGER RESERVE, TAMIL NADU

Gadana river originates from Alwarkurichi and Kadyam range of Western Ghats. Three tributaries (Pampar, Kallar and Iluppaiyar) join to form the Gadana river. It has one major upstream reservoir with 60 wetlands. During flooding this river confluences with the Tamiraparani river. Gadana river basin constitutes a sub-basin of the major Tamiraparani river basin. Fish survey forms a part of detailed studies on fish habitats and communities in streams/rivers of Western Ghats, South India. We collected a few specimens (January 1997), of *Pseudambassis ranga, Glyptothorax madraspatnum* from Iluppaiyar stream, *Hypselobarbus dobsoni* from Pampar and Thoniyar streams of Gadana river. *Puntius sarana orphoides* was collected from the outlet of Gadana reservoir. These species have not been recorded in Tamiraparani and its sub-basins by earlier workers (Johnsingh and Vikram 1987, Rema Devi *et al.* 1997). Hence they are new records to Gadana river and also to Tamiraparani river basin.

Pseudambassis ranga (Ham.-Buch. 1822)

This species was originally described by Hamilton-Buchanan (1822) in the Gangetic provinces. Later it was recorded by Tilak and Tiwari (1976) from Poona dist., Maharashtra State. Ajithkumar and Vijayan (1988) recorded it from Keoladeo National Park, Bharatpur, Rajasthan.

D-vii/11-14; P-i/11-12; V-i/5; A-iii/13-15

Body stout, deep and compressed. Preopercular hind edge almost smooth with one or two serrations at angle. Head length 2.7 to 2.9 times in standard length. Eye diameter 4.5 to 5 times in head length. Lateral line 47 to 53 scales.

Glyptothorax madraspatnum (Day 1873)

This species was originally described by Day (1873) from Bhavani river at the base of the Nilgiri hills. Kulkarni and Ranade (1974) recorded it from Maharashtra State. Later, this species was recorded by Shaji *et al.*, (1995) from Aralam Wildlife Sanctuary, Kerala.

D-i/6; P-i/9-10; V-i/5; A-ii-iii/8

Body elongate. Head pointed in front. Mouth inferior, lips papillated. Adhesive thoracic apparatus well developed. Paired fins non-plaited; lateral line complete; Caudal fin deeply forked; head length 3.6 times in standard length. Eye diameter 6 times in head length.

Hypselobarbus dobsoni (Day 1876)

This species was originally described by Day (1876) from Kurnool. Menon (1992) recorded this species from Krishna river drainage.

D-ii/9-10; P-i/13; V-i/8; A-ii/5

Dorsal and ventral profiles arched. Snout obtuse. Adult male specimens have tubercles, female without tubercles. Interorbital space slightly concave. Mouth normal. Head length 3.3 to 3.7 times in standard length. Eye diameter 3 to 4 times in head length. Lateral line complete with 28-31 scales. Predorsal scales 11-12.

A.G.K. Menon described *Hypselobarbus dobsoni* and *H. jerdoni* as valid species. But Talwar and Jhingran (1991) synonymise *H. dobsoni* with *H. jerdoni.* Based on our collections from streams of the Karnataka Western Ghats and from our ongoing research projects in rivers in the Tamil Nadu part of Western Ghats, these two should be considered as valid species.

Puntius sarana orphoides (Val.)

This species was originally described by Valenciennes from Java. Menon (1956) recorded it from Manipur.

D-iv/9; P-i/12; V-i/8; A-ii/5

Body somewhat deep. Eye moderate. Mouth small and terminal. Dorsal fin inserted nearer to base of caudal fin than to tip of snout.

Head length 3.9 to 4.1 times in standard length. Eye diameter 4.3 to 4.6 times in head length. Lateral line complete with 28-29 scales. Predorsal scales 10-12.

ACKNOWLEDGEMENTS

One of the authors (M.A) is thankful for financial assistance from Department of Biotechnology, Ministry of Science and Technology, Government of India. We thank Dr. V.K. Melkani, Field Director, Project Tiger, KMTR and Mr. Sornappan, ACF, for their support. The authors are grateful to Mr. A. Vanarajan and K. Sankar (Project assistants - DBT) for their assistance and help during the survey.

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22. SOME OBSERVATIONS ON THE BIOLOGY OF THE PARASITIC BEETLE *METOECUS PARADOXUS* LINN. (RHIPIPHORIDAE: COLEOPTERA) ON MUD DAUBER WASP GRUBS

(*With one plate*)

The Rhipiphorid beetles *Metoecus paradoxus* Linn. are seen in grassland vegetation and are parasitoids on mud dauber wasp grubs of the family Eumenidae.

The mud dauber wasps such as *Eumenes conica* Fab., *E. edwardsii* Sauss. and *Rhychium nitidulum* Fabr. belonging to Eumenidae build small pot like cells to raise their progeny (Ayyar, 1910). The female first selects a place such as buildings, tree-twigs, or undisturbed human habitats for constructing a cell. The wasp then takes water in its mouth from a nearby water source, goes to the mud collecting place, usually a termitarium or dryland, regurgitates water on the soil surface and with the help of its mandibles and forelegs starts scraping the wet soil to make